

**IN THE CLAIMS**

*Please amend the claims as follows:*

1. (Currently Amended) A diamond composite substrate, comprising:  
a diamond monocrystalline substrate having first and second opposed main faces; and  
a diamond polycrystalline film laminated thereon by a vapor phase synthesis,  
wherein the diamond monocrystalline substrate having a thickness defined by a spacing  
between the main faces to be at least 0.1 mm and no more 1 mm.
2. (Currently Amended) A diamond composite substrate according to claim 1, wherein a difference between an orientation of athe first main face, which has a largest surface area of the diamond monocrystalline substrate; and an orientation of a {100} plane is no more than 5 degrees, and  
the diamond polycrystalline film is laminated on an oppositethe second main face parallel to said mainthe first face.
3. (Currently Amended) A diamond composite substrate according to claim 2, wherein the first main face is the {100} plane.
4. (Cancelled)
5. (Currently Amended) A diamond composite substrate according to any of claims claim 1 to 4, wherein a thickness of the diamond polycrystalline film laminated over the diamond monocrystalline substrate is at least 0.1 mm and no more than 1 mm.

6. (Currently Amended) A diamond composite substrate according to ~~any of claims~~claim 1 to 5, wherein a ratio of the thickness of the diamond monocrystalline substrate to the thickness of the diamond polycrystalline film is between 1:1 and 1:4.

7. (Currently Amended) A diamond composite substrate according to ~~any of claims~~claim 1 to 6, wherein the diamond monocrystalline substrate is made up of a plurality of diamond monocrystals all having a same orientation of the first main face having the largest surface area, and

~~these~~the plurality of diamond monocrystals are joined by the diamond polycrystalline film formed by the vapor phase synthesis over ~~said~~the diamond monocrystals.

8. (Currently Amended) A diamond composite substrate according to ~~any of claims~~claim 1 to 7, wherein the difference between orientations of faces of the plurality of diamond monocrystals in a direction of rotation with respect to an axis perpendicular to the main faces thereof is no more than 2 degrees, and

the difference between the orientations of the respective main faces of the plurality of diamond monocrystals and the orientation of the {100} plane is no more than 5 degrees.

9. (Currently Amended) A diamond composite substrate according to claim 8, wherein the orientation of the main faces of the plurality of diamond monocrystals is {100}.

10. (Currently Amended) A diamond composite substrate according to ~~any of claims~~ claim 7 to 9, wherein a difference in thickness between the respective diamond monocrystals is no more than 10  $\mu\text{m}$ .

11. (Currently Amended) A diamond composite substrate according to ~~any of claims~~ claim 7 to 10, wherein a gap between the plurality of diamond monocrystals is no more than 500  $\mu\text{m}$ .

12. (Currently Amended) A diamond composite substrate, wherein a diamond monocrystalline substrate having first and second opposed main faces is made up of a plurality of diamond monocrystals in which a difference between orientations of the diamond monocrystals in a direction of rotation with respect to an axis perpendicular to main faces thereof of the diamond monocrystals is no more than 2 degrees,

and a difference between orientations of the respective main faces of the plurality of diamond monocrystals and an orientation of a {100} plane is no more than 5 degrees, the plurality of diamond monocrystals are joined by a diamond polycrystalline film formed by a vapor phase synthesis on an opposite the second face parallel to the respective main faces of the plurality of diamond monocrystals, and

an entire surface of said the first main face is integrated by vapor-phase synthesized diamond monocrystals grown using the diamond monocrystalline substrate as a seed crystal,

and

a spacing between the main faces is a thickness of the diamond monocrystalline substrate and at least 0.1 mm and no more than 1 mm.

13. (Currently Amended) A diamond composite substrate according to claim 12, wherein the orientation of the ~~main~~ faces of the plurality of diamond monocrystals is {100}.

14. (Cancelled)

15. (Currently Amended) A diamond composite substrate according to ~~any of claims~~ claim 12 ~~to~~ 14, wherein a thickness of the diamond polycrystalline film formed by the vapor phase synthesis over the plurality of diamond monocrystals is at least 0.1 mm and no more than 1 mm.

16. (Currently Amended) A diamond composite substrate according to ~~any of claims~~ claim 12 ~~to~~ 15, wherein a ratio of the thickness of the plurality of diamond monocrystals to the thickness of the diamond polycrystalline film is between 1:1 and 1:4.

17. (Currently Amended) A diamond composite substrate according to ~~any of claims~~ claim 12 ~~to~~ 16, wherein a gap between the plurality of diamond monocrystals is no more than 500  $\mu\text{m}$ .

18. (Currently Amended) A diamond composite substrate according to ~~any of claims~~ claim 12 ~~to~~ 17, wherein a difference in the thickness between the plurality of diamond monocrystals is no more than 10  $\mu\text{m}$ .

19. (Currently Amended) A diamond composite substrate according to ~~claims~~ claim 12 ~~to~~ 18, wherein a surface of the diamond polycrystalline film has been polished.

20. (Currently Amended) A diamond composite substrate according to ~~any of claims~~claim 12 to 19, wherein a surface roughness Rmax of the diamond polycrystalline film is no more than 0.1  $\mu\text{m}$ .

21. (Currently Amended) A method for manufacturing a diamond composite substrate having first and second opposed main faces, ~~wherein~~

lining up a plurality of diamond monocrystals having a same orientation ~~are lined up~~; forming a diamond polycrystalline film ~~is formed~~ by a vapor phase synthesis over said the plurality of diamond monocrystals; and joining the plurality of diamond monocrystals ~~are joined by~~ with the diamond polycrystalline film,

wherein the diamond monocrystals have a thickness of at least 0.1 mm and no more than 1 mm.

22. (Currently Amended) A method for manufacturing a diamond composite substrate according to claim 21, wherein a deviation between the respective orientations of the plurality of diamond monocrystals in a direction of rotation with respect to an axis perpendicular to main faces thereof, ~~which has~~ having a largest surface area, is no more than 2 degrees, and a difference between orientations of the respective main faces of the plurality of diamond monocrystals and an orientation of a {100} plane is no more than 5 degrees.

23. (Currently Amended) A method for manufacturing a diamond composite substrate according to claim 22, wherein the main face having the largest surface area of the respective

faces of the plurality of that make up the diamond monocrystals is the {100} plane.

24. (Cancelled)

25. (Currently Amended) A method for manufacturing a diamond composite substrate according to any of claims claim 21 to 24, wherein a thickness of the diamond polycrystalline film formed by the vapor phase synthesis over the plurality of diamond monocrystals is at least 0.1 mm and no more than 1 mm.

26. (Currently Amended) A method for manufacturing a diamond composite substrate according to any of claims claim 21 to 25, wherein a ratio of the thickness of the plurality of diamond monocrystals to the thickness of the diamond polycrystalline film is between 1:1 and 1:4.

27. (Currently Amended) A method for manufacturing a diamond composite substrate according to any of claims claim 21 to 26, wherein a difference in thickness between the plurality of diamond monocrystals is no more than 10  $\mu\text{m}$ .

28. (Currently Amended) A method for manufacturing a diamond composite substrate according to any of claims claim 21 to 27, wherein a gap between the plurality of diamond monocrystals is no more than 500  $\mu\text{m}$ .